L Number	Hits	Search Text	DB	Time stamp
-	22828	dwell adj time	USPAT;	2004/04/04 08:55
			US-PGPUB;	
			EPO;	
			DERWENT	
-	7313	(dwell adj time) same ATM or kiosk	USPAT;	2004/04/04 10:51
			US-PGPUB;	
			EPO;	
	(60)	A CALLULATION AS A STRAIGHT LIGHT NAME OF THE STRAIGHT AND A STRAI	DERWENT	2004/04/04 00 22
-	68	( (dwell adj time) same ATM or kiosk) same (number near5	USPAT;	2004/04/04 09:22
		(people or persons or individuals))	US-PGPUB;	
			EPO; DERWENT	
	61	(( (dwell adj time) same ATM or kiosk) same (number near5	USPAT;	2004/04/04 09:20
-	01	(( (dwell adj diffe) saffle ATM of Riosk) saffle (fidfiber flears) (people or persons or individuals))) and(@pd<20011230 or	US-PGPUB;	2004/04/04 09.20
		@ad<20011230 or @rlad<20011230 or @PRAD<20011230)	EPO;	
		@88 \ 20011250 01 @188 \ \20011250 01 @11\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	DERWENT	
_	620	( (dwell adj time) same ATM or kiosk) and ((queue or line or	USPAT;	2004/04/04 10:56
	020	wait\$) near5 (analy\$ or determin\$ or detect\$))	US-PGPUB;	200 1, 0 1, 0 1 20.50
		The state (analyty of accommitted accounty)	EPO;	
			DERWENT	
-	549	(( (dwell adj time) same ATM or kiosk) and ((queue or line or	USPAT;	2004/04/04 10:56
		wait\$) near5 (analy\$ or determin\$ or detect\$)))	US-PGPUB;	, ,
		and(@pd<20011230 or @ad<20011230 or @rlad<20011230 or	EPO;	
		@PRAD<20011230)	DERWENT	
-	202	((( (dwell adj time) same ATM or kiosk) and ((queue or line or	USPAT;	2004/04/04 09:23
	*	wait\$) near5 (analy\$ or determin\$ or detect\$)))	US-PGPUB;	
		and(@pd<20011230 or @ad<20011230 or @rlad<20011230 or	EPO;	
		@PRAD<20011230)) and ((number near5 (people or persons or	DERWENT	
		individuals)) or (length near4 (line or queue\$)))		
-	4504	( (dwell adj time) same ATM or kiosk) and ((custom\$ or modif\$ or	USPAT;	2004/04/04 10:55
		tailor or adapt\$ or program\$) with (message or display or	US-PGPUB;	
		communication or feature or function or presentation or	EPO;	
	535	demonstration or ad or advertisement)) (( (dwell adj time) same ATM or kiosk) and ((custom\$ or modif\$	DERWENT	2004/04/04 10:56
-	535	or tailor or adapt\$ or program\$) with (message or display or	USPAT; US-PGPUB;	2004/04/04 10:56
		communication or feature or function or presentation or	EPO;	
		demonstration or ad or advertisement))) and ((queue or line or	DERWENT	
		wait\$) near5 (analy\$ or determin\$ or detect\$))	DERVENT	
-	<del>473</del> ,	((( (dwell adj time) same ATM or kiosk) and ((custom\$ or modif\$	USPAT;	2004/04/04 10:56
	,, 5	or tailor or adapt\$ or program\$) with (message or display or	US-PGPUB;	230 1, 0 1, 0 1 10.50
		communication or feature or function or presentation or	EPO;	
		demonstration or ad or advertisement))) and ((queue or line or	DERWENT	
		wait\$) near5 (analy\$ or determin\$ or detect\$)))		
		and(@pd<20011230 or @ad<20011230 or @rlad<20011230 or		
		@PRAD<20011230)		

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DOCUMENT-IDENTIFIER:

US 20030036936 A1

TITLE:

Computer method and apparatus to

estimate customer

arrival times using transactional data

----- KWIC -----

Application Filing Date - APD (1): 20010817

Summary of Invention Paragraph - BSTX (3):

[0002] The present invention generally relates to a method of estimating

customer arrival times at a terminal (e.g., a cash register) using

transactional data from the terminal. The present invention may be implemented

to estimate queue length at checkout lanes in a retail establishment, in a

bank, at customer service desks, at self-service kiosks, at banks, or any other

location where a queue (line) of people or other objects may form.

Summary of Invention Paragraph - BSTX (7):

[0006] The general problem of estimating customer arrival times from

transaction data has not been considered by others. For our discussion, we

define customer as a person, group of people, object, or group of objects that

eventually results in one transaction. The general problem of estimating the

queue length at a terminal has been considered by a number of people. There

are two main methods conventionally recognized: video methods and one software

method. Video methods include those patented by Huang and Florencio of NCR

Corporation in U.S. Pat. Nos. 5,953,055 and 6,195,121, both entitled "System

04/04/2004, EAST Version: 1.4.1

L Number	Hits		DB	Time stamp
1	22828	dwell adj time	USPAT;	2004/04/04 08:55
		-	US-PGPUB;	
			EPO;	
			DERWENT	
2	7313	(dwell adj time) same ATM or kiosk	USPAT;	2004/04/04 10:51
-	,		US-PGPUB;	
			EPO;	
			DERWENT	
3	68	( (dwell adj time) same ATM or kiosk) same (number near5	USPAT;	2004/04/04 09:22
		(people or persons or individuals))	US-PGPUB;	
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			DERWENT	
4	61	(( (dwell adj time) same ATM or kiosk) same (number near5	USPAT;	2004/04/04 09:20
<b>"</b>	61	(people or persons or individuals))) and(@pd<20011230 or	US-PGPUB;	200 1/0 1/0 1 05.20
		@ad<20011230 or @rlad<20011230 or @PRAD<20011230)	EPO;	
		@ad<20011230 or @nad<20011230 or @PRAD<20011230)	DERWENT	
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5	620	( (dwell adj time) same ATM or kiosk) and ((queue or line or	US-PGPUB;	2007/07/04 10.30
		wait\$) near5 (analy\$ or determin\$ or detect\$))		
			EPO;	
_		A	DERWENT	2004/04/04 40:56
6	549	(( (dwell adj time) same ATM or kiosk) and ((queue or line or	USPAT;	2004/04/04 10:56
		wait\$) near5 (analy\$ or determin\$ or detect\$)))	US-PGPUB;	
ĺ		and(@pd<20011230 or @ad<20011230 or @rlad<20011230 or	EPO;	
		@PRAD<20011230)	DERWENT	
7	202	((( (dwell adj time) same ATM or kiosk) and ((queue or line or	USPAT;	2004/04/04 09:23
		wait\$) near5 (analy\$ or determin\$ or detect\$)))	US-PGPUB;	
ļ		and(@pd<20011230 or @ad<20011230 or @rlad<20011230 or	EPO;	
İ		@PRAD<20011230)) and ((number near5 (people or persons or	DERWENT	
		individuals)) or (length near4 (line or queue\$)))		
8	4504	( (dwell adj time) same ATM or kiosk) and ((custom\$ or modif\$ or	USPAT;	2004/04/04 10:55
		tailor or adapt\$ or program\$) with (message or display or	US-PGPUB;	
		communication or feature or function or presentation or	EPO;	
		demonstration or ad or advertisement))	DERWENT	
9	535		USPAT;	2004/04/04 10:56
		or tailor or adapt\$ or program\$) with (message or display or	US-PGPUB;	i
,		communication or feature or function or presentation or	EPO;	
		demonstration or ad or advertisement))) and ((queue or line or	DERWENT	
		wait\$) near5 (analy\$ or determin\$ or detect\$))	D L K K L K K	
10	473	((( (dwell adj time) same ATM or kiosk) and ((custom\$ or modif\$	USPAT;	2004/04/04 10:56
10	7/3	or tailor or adapt\$ or program\$) with (message or display or	US-PGPUB;	
		communication or feature or function or presentation or	EPO;	
		demonstration or ad or advertisement))) and ((queue or line or	DERWENT	
			PLINAFIAI	
		wait\$) near5 (analy\$ or determin\$ or detect\$)))		
		and(@pd<20011230 or @ad<20011230 or @rlad<20011230 or		
		@PRAD<20011230)		1